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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)

of 3

Complete if Known Application Number 10/541.057 Filing Date June 29, 2005 First Named Inventor Payne, et al. Art Unit Examiner Name Attorney Docket Number 7512.175

Examiner	Cite		U. S. PATEN	T DOCUMENTS	
examiner Initials*	No.1	Document Number Number-Kind Code ^{2 (f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		^{US-} 2006/0078962	04-13-2006	Chen, et al.	
	<u></u>	^{US-} 4,148,689	04-10-1979	Hino et al.	
		^{US-} 5,015,576	05-14-1991	Nilsson et al.	
		^{US-} 5,147,698	09-15-1992	Cole	
		^{US-} 5,422,116	06-06-1995	Yen, et al.	
		^{US-} 5,474,989	12-12-1995	Hashimoto et al.	
		^{US-} 5,658,592	08-19-1997	Tanihara et al.	
		^{US-} 5,830,459	11-03-1998	Cuero et al.	
		^{US-} 6,044,800	04-04-2000	Kubo et al.	
		^{US-} 6,245,901	06-12-2001	Von der Osten et al.	
		^{US-} 6,562,363	05-13-2003	Mantelle et al.	
		^{US-} 6,623,950	09-23-2003	Von der Osten et al.	
		^{US-} 6,638,621	10-28-2003	Anderson et al.	
		US-			

		FORE	IGN PATENT DOCU	JMENTS	***************************************	_
Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	Т
		Country Code ³ "Number ⁴ "Kind Code ⁵ (if known)	MM-DD-YYYY	i pproduct or once becomen	Or Relevant Figures Appear	T ⁶
		WO 00/11038	03-02-2000	Kumar		
		JP A 9 239 396				7
		WO 2004/018741	03-04-2004	Yi		
	_	JP-310041	11-24-1998	Ono et al.		7

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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Li-Qun Wu, et al., "Chitosan-Mediated and Spatially Selective Electrodeposition of Nanoscale Particles," Langmuir, Vol. 21, No. 8, pp. 3641-3646 (2005)	
		Li-Qun Wu, et al., "Spatially Selective Deposition of a Reactive Polysaccharide Chitosan Layer onto a Patterned Template," Langmuir, Vol. 19, No. 3, pp. 519-524 (2003)	
		Li-Qun Wu, et al., "Voltage-Dependent Assembly of the Polysaccharide Chitosan onto an Electrode Surface," Langmuir, Vol. 18, No. 22, pp. 8620-8625 (2002)	
		Tianhong Chen, et al., "Enzymatic Methods for in Situ Cell Entrapment and Cell Release," Biomacromolecules, Vol. 4, No. 6, pp. 1558-1563 (2003)	
		Mark J. Kkastantin, et al., "Integrated Fabrication of Polymeric Devices for Biological Applications," Invited Paper, Journal of Sensors and Materials, pp. 1-18 (9/2003)	
		Tianhong Chen, et al., "Nature-Inspired Creation of Protein Polysaccharide Conjugate and Its Subsequent Patterned Surface," Langmuir, Vol. 19, No. 22, pp. 9382-9386 (2003)	
		Rohan Fernandes, et al., "Eletrochemical Induced Deposition of a Polysaccharide Hydrogel onto a Patterned Surface," Langmuir Vol. 19, No. 10, pp. 4058-62 (2003)	
		Hyunmin, Yi, et al., "A Robust Technique for Assembly of Nucleic Acid Hybridiziation Chitosan," Analytical Chemistry, Vol. 76, No. 2, pp. 365-372 (1/15/2004)	
		Rohan Fernandes, et al., "Thermo-Biolithography: A Technique for Patterning Nucleic Acids and Proteins," Langmuir, Vol. 20, No. 3, pp. 906-913 (2004)	
		Li-Qun Wu, et al., "Spatially Selective Asembly of a Reactive Polysaccharide Layer onto Patterned Surfaces," Power Point Presentation of 11/8/2002 (22 slides)	

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-		NON PATENT LITERATURE DOCUMENTS	
Examiner nitials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		Sun et al., Tyronsinase-Containing Chitosan Gels: A Combined Catalysts and Sorbent for Selective Phenol Removal. Biotechnology and Bioengineering, Vol 51, pp. 79-86	
		Tatsumi, K. et al., Removal of Phenols from Wastewater by an Enzyme and Chitosan, Advances in Chitin Sciences, Vol. 2, pp. 864-869 (1997)	
		Muzzarelli, et al.,TYrosinase-Mediated Quinone Tanning of Chitinous Materials, Carbohydrate Polymers, Vol. 24, pp. 295-300 (1994)	
		Wada et al., "Removal of Phenols and Aromatic Amines from Wastewater by a Combination a Coagulent," Biotechnology and Bioengineering, Vol. 45, pp. 304-309 (1995)	
		Payne et al., "Tyrosinase Reaction/Chitosan Adsorption for Selectively Removing Phenols from Aqueous Mixtures," Biotechnology & Bioengineering, 40, No. 9 (1992)	

-3	Examiner Signature	/Harry Wilkins/	Date Considered	06/16/2010
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